

**Economic Commission for Europe  
Committee on Sustainable Energy  
Group of Experts on Gas**

**Second session**

Geneva, 20-21 January 2015

Item 7 of the provisional agenda:

Best practice guidance on the role of natural gas in increasing the uptake of renewable energy

**Draft Terms of Reference of the Task Force on the role of  
natural gas in increasing the uptake of renewable energy**

**Note by the secretariat**

**I. Introduction**

1. In order to increase the uptake of renewable energy sources, there is a need to have a reliable source of energy and capacity when the renewable energy sources are not available. There is also a need for rapid-response capacity to maintain balance in power networks in light of oscillations in the output of intermittent energy sources. Gas could be such a source. Development of best practice on the role of natural gas in increasing the uptake of renewable energy would be based on a policy dialogue and exchange of experiences and practices on the role of natural gas in enabling renewable energy policies. This work, undertaken from the perspective of the natural gas industry and gas-fired power plant operators, would complement and take into account work to be undertaken by the Group of Experts on Renewable Energy in developing best policy practices for renewable energy. Relevant lessons could be learned from the development policies carried out by a majority of ECE countries in the past years.

2. Following its first session in April 2014, the Group of Experts established a Task Force to develop best practice guidance on the role of gas in increasing the uptake of renewable energy.

3. One of the activities of the Group of Experts on Renewable Energy will be to identify those communities in the ECE region that, at present, have no access to energy, and suggest ways to ensure that these communities have access to renewable or alternative sources of energy as soon as possible. Energy companies could be asked to help to achieve that objective as part of that work. The Group of Experts on Gas will assess the role that natural gas could play in providing that access in supporting renewable energy uptake (which in no way means that natural gas could not provide access in its own right).

4. During its meeting and conference calls between the sessions, the Bureau of the Group of Experts on Gas noted that the role of natural gas in helping achieve the objective of access to energy for all in the ECE region is significantly different from other parts of the world, given the fact that over 99% of population in the ECE region have access to electricity and other modern energy services. The Group of Experts on Gas has therefore decided to concentrate on the interactions between intermittent renewable energy sources and gas-fired power plants and less on energy access in a strict sense.

## **II. Work and deliverables of the Task Force on the role of natural gas in increasing the uptake of renewable energy**

5. The work of Task Force on best practice guidance on the role of natural gas in increasing the uptake of renewable energy is to:

- Review the range of technology options for improving energy access, including an assessment of commercial feasibility;
- Prepare a systematic assessment of the consequences of renewables uptake in the energy mix for the amount of back-up capacity and energy that is required. The assessment will include an analysis of utilization rates of gas-fired power plants vis-à-vis renewables in ECE member States;
- Conduct an analysis of the economics of gas-fired power in the context of green policies on renewables and gas. The analysis should include an assessment of the impacts of support schemes on the gas sector and on system management;
- Prepare a Best Practice Guidance on the Role of Natural Gas in Significantly Increasing the Uptake of Renewable Energy in the ECE Region and Helping Achieve the Objective of Access to Energy for All in the ECE region; and

6. Deliverables of the Task Force are:

- Assessment of the economic and technical feasibility for natural gas to support renewables providing energy access throughout the ECE region;
- Assessment of the systemic consequences of renewable energy uptake;
- Economic analysis of natural gas in a context of green policies; and
- Best Practices on the Role of Natural Gas in Significantly Increasing the Uptake of Renewable Energy in the ECE Region and Helping Achieve the Objective of Access to Energy for All in the ECE region.

## **III. Draft best practice guidance in the role of natural gas in increasing the uptake of renewable energy**

7. To be discussed and agreed upon by the Task Force following their meeting on 20 January 2015. It will be then presented to the Group of Experts on 21 January 2015.